

## Weekly Berry Call – April 17, 2012

**Participants:** Marvin Pritts (Finger Lakes region/Ithaca), Cathy Heidenreich (Western NY/Finger Lakes region/Geneva), Laura McDermott (Eastern NY/Upper Hudson/Lower Adirondack), Molly Shaw (South Central/Southern Tier), Dale Ila Riggs (Stephentown, Eastern NY), Jeff Miller (Oneida County, Marcy), Kathy Demchak, (Pennsylvania State University, University Park), Pam Fisher, OMAFRA, (Ontario, Canada), Kevin Schooley, (NASGA, Ontario), Stephanie Melanbacher, .

**Growing degree day summaries:** (courtesy Scaffolds Fruit Journal, Vol. 21, No. 6, April 16th)

Geneva readings are for western NY, Highland Lab is in the Hudson Valley of NYS.

<b>Week ending April 16, 2012:</b>	<u>43°F</u>	<u>50°F</u>
Current DD accumulations (Geneva 1/1–4/16/12):	330	167
(Geneva 1/1–4/16/2011):	117	44
(Geneva "Normal"):	145	60
(Geneva 1/1–4/23 predicted):	404	208
(Highland 1/1–4/16/12):	412	202
(Highland 1/1–4/16/11):	150	59

### Reports from the Field

#### Ontario, Canada

Straw is coming off berries slowly. Very hot on the 16<sup>th</sup> and very dry - Small rain negated by dry windy weather. Winter survival seems good. Day Neutral strawberries beginning to bloom and new DN plantings are going in on raised beds. Raspberries did well during winter and are at ½" green. Blueberries also had good winter survival and buds are swelling. Some growers irrigated blueberries for frost protection in southern parts of Ontario. Currants are in full bloom.

#### Western NY/Finger Lakes region/Geneva

Strawberry flowers still in crown; blueberries at pre-bloom. Weather conditions similar to Ontario. Little change from previous week.

#### Pennsylvania

Chandler strawberries on plastic have large green fruit vs. Valley Sunset in matted row that have flower buds just emerging. Big range on blueberry crop development – some damage has resulted from the frost protection efforts. Lost some blackberries in the SE to frost. Gooseberries have small fruit. Reports of fruit flies already – although NOT SWD. Very, very dry.

#### Steuben County

Currants and Gooseberries leafing out – very dry but cool nights have slowed crop development.

#### Eastern NY/Upper Hudson/Lower Adirondacks

Very dry - 3/10" was the most rain mentioned in close to a month. Crop development varies widely from north to south. Southern regions have experienced damage to Chandler on plastic and possibly some blueberry damage.

#### Stephentown, Eastern NY

Blueberries are advancing nicely. Raspberries are beginning to push. Wendy strawberry has buds present in crown and king blooms in some plants.

### Topics of Discussion

**Disease problems in strawberries?** Kevin Schooley sent photos in advance of the call (see below). These plants came from older plantings of Annapolis and Myra. The new tissue emerging from the crown seems ok at first but then in one week the plants seem to collapse. The crown, when cut, is water soaked and brownish. There could have been some damage as berries were pushing under the straw as a result of warm temperatures. There was discussion about whether Phytophthora could be involved. That disease is most active when soil temperatures fluctuate between cold and warm. But the shape of the browning make it look more similar to anthracnose crown rot. One suggested Botrytis crown rot as a possible cause. Group suggested a diagnostic test to rule out Anthracnose and Phytophthora.

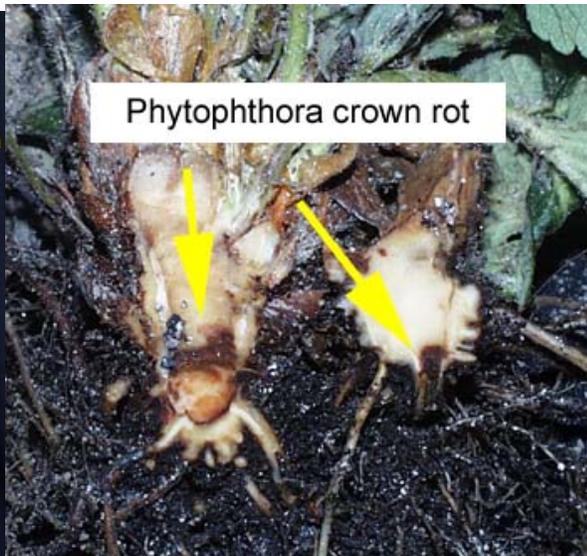
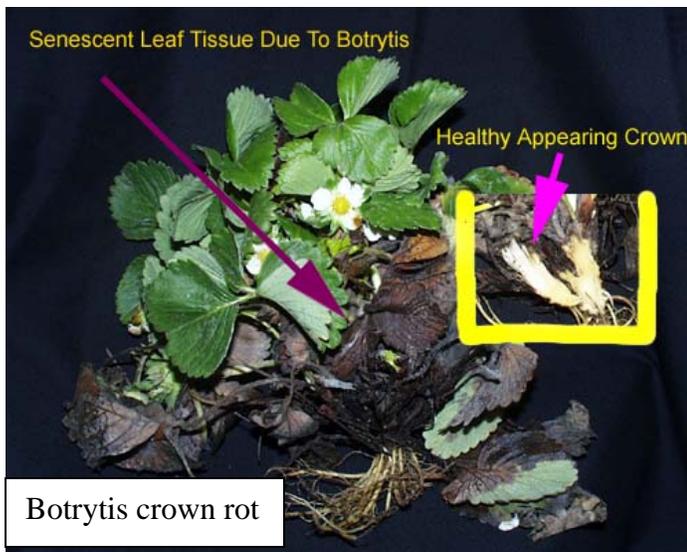
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Clockwise from above. These photos are from NCSU website on **Anthraxnose in Strawberries**. ([http://ipm.ncsu.edu/current\\_ipm/alert13.html](http://ipm.ncsu.edu/current_ipm/alert13.html)) Symptoms of Anthracnose include brown margins around the leaves. When the crown is cut longitudinally, internal crown symptoms include brown discoloration in the vascular tissue, especially at the apical portion of the crown. As the disease progresses, much of the top portion of the crown acquires a red-brown discoloration.

**Botrytis crown rot** is more likely in plantings with dense, vigorous foliage. The plant might appear to wilt and flower trusses and leaves could die back. The Botrytis pathogen rarely progresses into the crown.

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*Phytophthora cactorum* causes **Phytophthora crown rot**. Plants tend to collapse suddenly and when crowns are sliced longitudinally they reveal brown discoloration at the middle or lower portion of the crown. *P. cactorum* also causes leather rot of the fruit. The oospores produced are very persistent in the soil, but corrective measures to amend the site may radically reduce the incidence of disease.

**Fruit Flies** – The flies caught do not have any spots on wings, so likely are not SWD. Still the presence of any type of fruit flies even around compost piles, kitchen raisins etc. gives one pause. Monitoring projects region wide will be ongoing for SWD. Current monitoring in North Carolina has already revealed positive ID for SWD in small numbers, see <http://ncsmallfruitsipm.blogspot.com/2012/04/spotted-wing-drosophila-adults-trapped.html>, for more specific information. The site is quick to point out that the link between trap catches and fruit infestation is not well known, but this pest will be the topic of continued discussion.

**Regional Pest Alert**

**Spotted Wing Drosophila**  
*Drosophila suzukii*

**Introduction**  
The Spotted Wing Drosophila (SWD), *Drosophila suzukii*, is a small vinegar fly with the potential to damage many fruit crops. In the North-Central region, it was first detected in Michigan in late September 2008. Unlike most other vinegar flies that require damaged fruit to attack, SWD causes damage where the female flies cut a slit and lay eggs in healthy fruit. This insect is a pest of many berry crops, cherries, grapes and other tree fruits, with a preference for softer-fleshed fruit. Given the propensity for this insect to spread and its potential to infest fruit, it is important to learn about monitoring and management of SWD to minimize the risk of harm developing to fruit and affecting fruit marketability.

**Damage**  
Female SWD can cut into intact fruit using their serrated ovipositor to insert eggs under the skin. By being able to insert eggs into intact fruit, the larvae of SWD can be present during ripening, leading to a risk of detection in ripe fruit after harvest. During egg laying, some rot and fungal diseases can also be introduced, further affecting fruit quality. There is a greater risk of fruit contamination or harvest loss from SWD compared with native species that lay eggs only in already-damaged and rotting fruit.

**Identification**  
The adult SWD has two distinctive features: 1) The female SWD has two distinct serrated wings (the wings of males are not serrated) and 2) a very long and sharp ovipositor (the ovipositor is a distinctly morphological feature, longer than other vinegar fly species and with two rows of serrations). Photos by Martin Haverkamp, G. C. D. and David Arendsen (R).

USDA NIFA IPM Center

For more information about **Spotted Winged Drosophila**, register for the Small Fruit Webinar:  
**“Getting Ready for Spotted Wing Drosophila: Understanding Risks for Small Fruit Crops and Current Management Options”**

**Dr. Greg Loeb, Professor**  
**Department of Entomology**  
**Cornell University, Geneva, NY 14456**

**Friday April 27, 2012**  
**1 PM – 2 PM EDT**

Join Dr. Greg Loeb, Cornell University grape and small fruit entomologist, as he discusses the new invasive species spotted wing drosophila (*Drosophila suzukii*) that arrived in the Northeast in 2011. Originally from Asia, this fruit pest was first discovered in California in 2008 and has now spread to 20+ states, including the Northeast. Where it has become established it has caused major damage to soft-skinned fruit with blueberries, raspberries, and cherries being particularly vulnerable, although day-neutral strawberries in the late summer are also likely to be seriously impacted. The reason this species of fruit fly is such a threat to berry crops is that the

female is able to lay her eggs in ripe or ripening fruit as compared to other fruit fly species that wait until fruit is overripe or decaying, hence of less economic value.

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In this webinar, Dr. Loeb will first review the basic biology of spotted wing drosophila (SWD), identification, history of invasion, and crops at greatest risk, and then go on to discuss management strategies including monitoring and possible control options. To register e-mail Cathy Heidenreich, [mcm4@cornell.edu](mailto:mcm4@cornell.edu).

**Poor Strawberry Emergence:** Problems noticed in older plantings that had been cultivated using a Hillside cultivator resulting in raised beds over the years. Could this technique be allowing plants to have increased exposure to the roots which spell trouble for winter survival in open winters? Or could the stress from last years' rain and now combined with extreme dryness be creating problems for berries?

**Mummyberry in blueberries:** Standard protocol for this disease is to use Indar at ¼" green. Also disturbing mulch so that apothecia do not fruit is very helpful strategy. If growers have missed the first application of Indar, and did have very heavy pressure, they may still want to put a cover on (according to Dr. Kerik Cox, Cornell). If the mummyberry infection from the year prior was minor, and especially if new mulch was applied this spring and the weather remains warm and dry, infection rates will be low, so fungicide not necessary. Indar does have excellent kick back so one application will offer lengthy protection.

Pristine, which used to be labeled in NY for this disease has been dropped for blueberries due to phytotoxicity shown on the west coast. The central and east coast has not seen this problem and so are applying for a 2EE label, but it will be a while for NY growers. Other states should expect the label this season.

**Cover crops**– If berry growers are looking for an early cover for a new piece of ground, oats might work well. For more information on cover crops, check out: <http://calshort-lamp.cit.cornell.edu/bjorkman/covercrops/index.php>. Even though it says cover crops for vegetable growers it is a useful resource for berry growers.